

June 1, 2017

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By e-mail to: WUE@water.ca.gov

Subject: Comments on May 18, 2017 Revised Draft of “Water Audits and Water Loss Control Reporting Regulations”

Dear Mr. Thompson:

The California-Nevada Section, American Water Works Association (CA-NV AWWA) recognizes the thoughtful consideration given to stakeholder comments received on the prior draft of “Water Audits and Water Loss Control Reporting Regulations,” which was evident in the inclusion of many of these in the May 18, 2017 revised draft regulation. CA-NV AWWA also appreciates the opportunity to provide additional comments on the revised draft regulation, which is necessary for implementation of Senate Bill 555 (Wolk, 2015). With financial support from the State Water Resources Control Board and US Environmental Protection Agency, CA-NV AWWA is leading the Water Loss Technical Assistance Program (TAP) that is assisting the target urban water suppliers in completing water loss audits of their respective distribution systems. Our comments however, do not in any way represent the views of the state and federal agencies that provided financial support to the Water Loss TAP.

Support

- Section 700. We support the clarification throughout of potable water exclusivity consistent with California water code which defines an urban retail water supplier in terms of potable water customers and delivery volume. While we support efficient use of all water including recycled water, it is important to note that the AWWA water audit was designed for use on potable water distribution systems, and must be conducted on an individual, discrete system. To the extent recycled water systems are separated hydraulically and operationally from potable systems, it is inappropriate to combine recycled and potable water into a single audit. The M36 manual addresses the water balance in the context of potable water and contains only three mentions of recycled water

(p. 160, 356, 382), and all are in context of distinguishing it from potable water for the purpose of excluding recycled water from the potable water balance.

- Section 700.1 (g) We appreciate the addition of the General Manager definition which recognizes alternative job titles used by California water suppliers to describe the executive position with overall responsibility for managing potable water distribution systems.

Recommended clarifications/revisions

- Sections 700.2, 700.4, and 700.5 refer to “version 5.0” (or the abbreviated “v5.0”) of the AWWA Free Water Audit Software. We appreciate the revision made to clarify regulation updates would be triggered “upon an AWWA next generation update of its related Free Audit Software (e.g., after the version 6.0 release).” However, despite this directive in §700 (c), the specific reference to “5.0” creates a technical barrier for California utilities to use any future minor update to the software released as version 5.1 (up to version 5.x), which could include bug fixes or functional improvements.

Recommendation: Replace “version 5.0” and “v5.0” with “version 5” or “v5” respectively, in Sections 700.2, 700.4, and 700.5. Alternatively, if necessary to keep that reference for consistency with SB 555, add language in the regulation to incorporate subsequent releases, if any, of version 5 of the software, i.e., versions 5.1 – 5.x.

- Section 700.4 (a) (2): This paragraph provides insufficient quality control for demonstration of the proper conduct of water loss audits or Level 1 validations. As written, a person with very limited experience could assert his or her competency based solely on very minimal qualifications. If implemented in this manner, quality and inconsistency problems are highly likely in the 2018 dataset, which is a critical dataset as one of only two years of audits to serve as baseline to inform performance benchmarking in 2019. Additionally, §700.4 provides no mechanism for the demonstration of a person’s qualifications, which leaves an undue burden to individual utilities to make an appropriate determination, and invites wide inconsistency in Level 1 audit validation.

Recommendations:

- 1) *Re-establish deleted language in 700.4 (a): “or until the date that the CA-NV AWWA establishes a water audit validator certificate program”*
- 2) *Stipulate number of water loss audits conducted as “20”, and must have been for 20 separate and distinct water utilities*
- 3) *Stipulate number of Level 1 validations conducted as “20”, and must have been for 20 separate and distinct water utilities*

- 4) *Provide a mechanism for DWR review of qualifications statements and work products from individuals presenting required evidence of the technical qualifications cited in 700.4 (a) (2).*
- 5) *Add language for DWR to conduct a quality control review of the 2018 validated water loss audit submittals so as to identify inconsistencies or quality issues that may exist, and direct any found issues to be resolved before incorporating the 2018 dataset into the performance benchmarking review.*

- Section 700.5 (c) appears to allow a public water supplier to combine multiple systems in “a combined set of spreadsheet worksheets...” which is counter-productive and should be removed. From a technical, managerial, and validation perspective, each audit must reflect a single discrete system. Allowing water suppliers to combine data from non-contiguous, hydraulically independent distribution systems into a single audit report is not consistent with water auditing practice. For purposes of prioritizing leak detection activities, and appropriately associating cost to water loss control actions it is critical that a unique audit be performed on each unique distribution system.

Recommendation: Modify (c) as follows: ~~In the case of urban retail water suppliers with two or more separate public potable water systems, the urban~~ Urban retail water suppliers shall submit ~~either separate worksheets~~ AWWA Free Water Audit Software spreadsheet worksheets meeting the requirements in Section 700.5(b)(1) for each potable water system. ~~or a combined set of spreadsheet worksheets for its potable water systems.~~

- Section 700.3 (b) (5), striking the original clauses (D) & (E) eliminates documentation of 'recommended changes' to data inputs and data grades. The language deleted appears to eliminate what would be redundant to what gets documented in (5) (C) - the basis for input and basis for grade. This captures the rationale for the *final* input. We therefore support deleting paragraphs (D) and (E) which inappropriately focused on changes occurring from pre-validation to post-validation (which is akin to changes from *draft* audit to *final* audit. The changes are irrelevant, what is relevant is the basis of the *final* inputs and grades, which incorporates any changes needed from the validation review).

Any recommendations that come out of the validation review, not already captured in the final inputs and grades in the validated audit, should get documented as they are forward looking. We believe this is appropriately addressed in the language via the current paragraph 700.3 (E).

We recognize that there may be instances when a water system may not accept water audit input changes that were recommended during validation. It is appropriate to require validator recommendations in these instances.

Recommendation: Reinsert original 700.3 (E) as revised: Any recommended changes to water audit inputs that were not accepted by the potable water system, and rationale.

- Section 700.3 (b) (2) (D) was revised by insertion of the phrase “customer meter accuracy derivations, including....” By inserting the word “customer” this revision is inconsistent with the original, appropriate subject of “*supply* meter[s]” [emphasis added]. Further, to require documentation on the “derivation of meter accuracy” is inconsistent with Water Research Foundation (WRF) Project #4639, which requires meter testing documentation but not how the data was used to calculate an error adjustment.

Recommendation: Strike out newly added text "... customer meter accuracy derivations, including...."

- Section 700.1 (b): The mention of exported water and additional content in the Authorized Consumption definition does not add value and will unnecessarily invite confusion. While we recognize this definition was taken verbatim from the M36 glossary, we believe the purpose of these rules is not to define terms already defined in the M36. Legitimate situations may exist where "water sold to neighboring utility" may be categorized as Authorized Consumption, and M36 in its narrative further discusses these considerations. It is best to provide a higher level definition in the rules for the Authorized Consumption.

Recommendation: Rewrite paragraph as follows:

(b) "Authorized Consumption" means the volume of water taken by registered customers, the water supplier, and others who are implicitly or explicitly authorized to do so. Authorized consumption may be billed or unbilled, metered or unmetered.

- A change was made throughout the draft regulation to consistently use the term Data Validity Score. This is not appropriate. Data Validity Score is the measure of the overall trustworthiness of the data entered into the audit, and is a composite value calculated from Data Grading values. Data Grading values are the specific grades (on a scale of 1-10) applied to each input component.

Recommendation: Correct "DVS" references to "Data Grading Values" as appropriate throughout.

- Section 700.5 (a)(2) & (3) We support providing the option for each water system to select either fiscal or calendar year for reporting. The current draft appears to allow for audits that are other than the “previous fiscal year” as of October 1, as required by SB 555 and allows fiscal information pulled from a different period than the water volume information represents. Allowing for financial incongruence is inconsistent with M36, and has the

potential to skew the economic value attached to real and apparent losses. M36 does not require that cost input be from audited financial statements. The data validity grade assigned with this element of the water audit depends only upon the frequency of financial auditing as a business practice.

Recommendation: Reestablish prior version of 700.5 (a) and remove new subitems (1) (2) & (3):

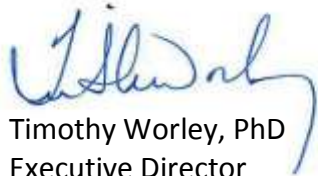
"The report shall include data spanning 12 consecutive months for either the previous calendar year or the water supplier's fiscal year."

- Section 700.5 (b) (2) We support adjusting the referenced window from 1 to 3 years to recognize actions taken may extend over multiple years. We do not however believe it is appropriate to require this level of reporting for audits submitted in 2017 given rulemaking delays, and since many water system are just now learning non-revenue water management and water audit concepts.

Recommendation: Re-establish deleted language "Beginning in 2018..."

Thank you again for considering these comments as you finalize the regulation. CA-NV AWWA looks forward to working with the Department for the successful implementation of all provisions of SB 555. If you have questions about the comments contained herein, please do not hesitate to contact me at (909) 291-2102 or tworley@ca-nv-awwa.org.

Sincerely,



Timothy Worley, PhD
Executive Director